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## HUMAN AUTOMATA IN CLASSICAL TRADITION AND MEDIAEVAL ROMANCE<sup>1</sup>

In the second volume of his well-known treatise, *Virgilio nel medio evo* (2d ed., Florence, 1896, 2 vols.), Domenico Comparetti has enumerated the various automata which were ascribed to the magic art of Virgil in the Middle Ages.<sup>2</sup> Many other automata are noted in W. A. Clouston's *On the Magical Elements in the Squire's Tale with Analogues*, in Part II of John Lane's *Continuation of Chaucer's "Squire's Tale,"* Chaucer Society's Publications, Second Series (issue for 1889). Clouston's treatise has a wider scope than Comparetti's, as far as this particular matter is concerned, and his list of examples, drawn from oriental as well as occidental sources, includes all sorts of wonderful contrivances, from magical steeds like that in the *Squire's Tale* to Major Weir's staff.<sup>3</sup> He does not devote, however, any especial attention to the French mediaeval romances. On the other hand, examples from these works have latterly been collected by Adolf Hertel in his Göttingen dissertation (1908), entitled *Verzauberte Örtlichkeiten und Gegenstände in der altfranzösischen erzählenden Dichtung*, pp. 17 ff. For some years previously I had myself been interested in the subject of human automata in literature and in my reading of the romances had noted

<sup>1</sup> I have limited myself to human automata, although this is, of course, only one branch of the general subject of automata. I have accordingly excluded animal automata endowed with intelligence such as are found in literature from the dogs of gold and silver that keep watch at the doors of the palace of Alcinous, *Odyssey*, vii. 91 ff., to the copper lions that guard the *ponz de l'espee* that leads into the kingdom of Gorre in the *Livre d'Artus* of MS 337 (cf. Freymond's analysis in *Ztschr. f. franz. Sprache u. Lit.*, XVII, 65) and beyond.

<sup>2</sup> For the modern period Comparetti is supplemented by C. G. Leland's *Unpublished Legends of Virgil*, New York, 1900. Notice especially as bearing on the subject of this article, the story (pp. 152 ff.) called "Virgil, the Wicked Princess, and the Iron Man." The princess calls in young men, feasts them, and sleeps with them, but at breakfast next day they are poisoned. A young friend of Virgil suffers death in the adventure, so Virgil makes an Iron Man, who goes through the experience of the rest, but the poison, of course, has no effect on him. The automaton takes her to an underground cavern where the ghosts of her murdered lovers are. There she is compelled to drink poison.

<sup>3</sup> For instances of broom and pestle which, by magic, fulfil all commands, carry water, etc., see the article, "La fabula del pistello da l'agliata," Reinhold Köhler's *Kleinere Schiften*, II, 435 ff. (3 vols. Berlin, 1898-1900).

instances of the occurrence of this conception.<sup>1</sup> My list tallies substantially with Hertel's, but he has omitted some examples and has made no attempt to trace any historical connection between those that he gives. Such a connection, however, is traceable in the majority of cases. Furthermore, he merely offers the general suggestion that such conceptions are probably of oriental origin. This, I believe, is true in the main and should have been taken into account by Comparetti<sup>2</sup> in his study of the Virgil legend, since Southern Italy was peculiarly exposed to oriental influences. Nevertheless, it is worth noting that conceptions of this kind, as the following pages will show, were common in Greek literature and may have penetrated thence into the oral traditions of Western Europe.<sup>3</sup> In any event, it is interesting to bring together the two sets of examples—ancient and mediaeval.

The earliest human automata in literature are those described in the *Iliad*, xviii. 417 ff., in connection with the visit of Thetis to Hephaestus concerning the shield of Achilles. It is to be observed that these "handmaidens of gold" are endowed with intelligence, a point that is not always clear in the mediaeval examples. The lines are as follows:

But there were handmaidens of gold that moved to help their lord, the semblances of living maids. In them is understanding at their hearts, in them are voice and strength and they have the skill of the immortal gods. These moved beneath their lord.—*The Iliad Done into English Prose*, by A. Lang, W. Leaf, and E. Myers, London, 1907.

The following are the remaining examples in Greek literature, as far as they are known to me, which I give (in chronological order) with such comment as seems necessary in individual cases:

<sup>1</sup> In his note on the "Salle aux Images," J. Bédier, *Le roman de Tristan, par Thomas, II*, 312, note 2 (Société des Anciens Textes Français) had already cited three instances, *Huon de Bordeaux*, the prose *Lancelot*, and the continuation of Chrétien's *Perceval*. See also some examples in F. Wohlgemuth's *Riesen u. Zwerge in der altfranzösischen Dichtung*, 37 f. (Leipzig, 1907). The figure in *Fierabras*, 2483 ff., however, is certainly a giantess, not an automaton. Similarly the figure cited by Hertel, p. 17, from *Fergus*, 2126 ff. (p. 58), is merely a statue.

<sup>2</sup> Comparetti, II, 19 ff., argues convincingly that the legend of Virgil originated at Naples. Clouston, p. 305, is inclined to believe that the notion of Virgil's magical images was introduced into Europe by the Arabs through Spain.

<sup>3</sup> One has to reckon also with the possibility of independent invention—for, after all, the conception even of human automata is not a very far-fetched one. It is most likely, however, that with the Greeks also the notion of automata was of oriental origin. The story of *Talus* is ascribed to Phoenician influence in L. Preller's *Griechische Mythologie*, I, 136, 4th ed., Berlin, 1894.

Pindar, *Olympia*, vii. 94 ff., praising the skill of the people of Rhodes in the arts, says: "Works of art like unto living and moving creatures used to go about their streets."<sup>1</sup>

Plato, *Euthyphro*, Teubner ed. of Plato, I. 17, Socrates says:

Your words, Euthyphro, are like the handiwork of my ancestor Daedalus; and if I were the sayor or propounder of them, you might say that this comes of my being his relation and that this is the reason why my arguments walk away and wont remain fixed where they are placed.<sup>2</sup>

We have evidently here an allusion to automata fashioned by Daedalus—whether human or not, it is impossible to say.

The most famous of all such conceptions in literature, perhaps, is Talus, the man of brass, in the *Argonautica* of Apollonius of Rhodes, IV, ll. 1636 ff., whom Zeus gave to Europa as a guardian of Crete:

Who was a survivor of the brazen race of ash-born men among men semi-divine.<sup>3</sup>

It is to be observed, however, from these lines that Talus was not the work of an artificer or magician, as is usually the case with such figures, but a survivor from the Age of Brass—the last of the *χάλκειον γένος* of Hesiod's *Works and Days*, ll. 143 ff., which passage Apollonius here evidently has in mind, only he interprets the adjective in a literal sense. The passage in Apollonius is too long to

<sup>1</sup> So translated in a note to the passage in C. A. M. Fennell's edition. This seems to me a better interpretation than "were placed in the high roads." W. Christ in his edition of Pindar (Leipzig, 1896), sees in the line a reminiscence of the above-quoted passage from the *Iliad*.

<sup>2</sup> *The Dialogues of Plato, translated into English* by B. Jowett (4 vols., New York, 1892), I, 296. This passage is cited by Fennell in the note referred to above. Socrates uses the same image in Plato's *Meno*. See Teubner ed. of Plato, iii. 357.

<sup>3</sup> Hesiod says, *loc. cit. infra*, that Zeus created the men of the Age of Brass from ash-trees. For phrases in Greek writers which seem to imply that man was originally created from trees or stones, see note to the *Iliad*, xxii. 126, in Walter Leaf's edition (2d ed., 1900-2). Similar are Virgil, *Aeneid*, viii. 314, and Juvenal's *Satires*, vi. 12.

In an instructive note on Talus—the best I have seen on the subject—H. de la Ville de Mirmont, *Apollonios de Rhodes: Les Argonautiques: Traduction française suivie de notes critiques* (Bordeaux and Paris, 1892), p. 402, says that only in Apollonius and Eustathius (twelfth century) is Talus represented as given to Europa by Zeus. See Eustathius' *Commentarii ad Homeris Odysseam* (2 vols., Leipzig, 1825-26), II, 238. Commenting on *Odyssey*, xx. 302, he describes how Talus caught strangers that came to Crete, leaped into the fire with them, and, holding them to his breast, grinned sardonically as they were consumed. Usually Talus is a brass giant made by Hephaestus and given by him to Minos to guard Crete. But only Apollodorus (quoted below) seems to state this distinctly. According to Cinaithon—see Pausanias, VIII. 53, cited by the French translator—Talus was the father of Hephaestus.

give in its entirety. It is sufficient to say that being of brass, Talus was invulnerable except for an artery-like pipe which, filled with ichor, runs down the side of the ankle. He prevents the Argonauts from landing by throwing stones at them, but Medea by her enchantments causes him to strike the vein against a sharp-pointed rock, so the vital fluid runs out and he perishes.

In the *Bibliotheca* of Apollodorus Atheniensis, p. 33 (Teubner ed.), we have a description of Talus, according substantially with that of Apollonius of Rhodes—only Apollodorus says that Hephaestus gave the man of brass to Minos, and he mentions various accounts of his end: Medea ran him insane by her arts or under the pretense of rendering him immortal, she pulled out the nail which kept in the vital fluid, and some even said that Poias had slain him by shooting him in the ankle, that is, in the one vulnerable spot.<sup>1</sup>

Just as Apollonius interprets Hesiod in a literal sense and regards the men of the Brazen Age as really made of brass, so for Lucian the men of the Golden Age were really made of gold. In his *Cronica* (Teubner ed. of Lucian, III, 305 f.) the priest says to Cronos (Saturn) that if a man of the Golden Age were to turn up in his (the priest's) time, he would be immediately torn to pieces, so eager would everybody be to get a piece of him. See *ibid.*, p. 312 in the *Epistolae Cronicae*, for the same conception. In Lucian this might be regarded merely as a humorous fancy, but the similar passage concerning

<sup>1</sup> Apollodorus, p. 18, relates of a Talus of Athens that he was the nephew of Daedalus whom he rivaled in ingenuity. Daedalus at last killed him, being jealous of his skill. Evidently this Talus was not a man of brass, and he has little in common with the Cretan Talus save his name. H. de la Ville de Mirmont in the above-mentioned note speaks of the difference between the Athenian and Cretan traditions concerning Talus. He quotes a saying preserved by a scholiast from Sophocles' lost play, *Talos*, to the effect that "it was the decree of fate that this giant should die." This seems to imply the same conception of Talus as in the Cretan tradition.

In his *Observations on the "Fairly Queen" of Spenser* (2 vols., London, 1862) Thomas Warton, I, 97, cites the passage concerning Talus in Plato's *Minos* (Teubner ed. of Plato, iv. 453). Plato, however, rationalizes the legend. According to Apollodorus, Talus made the circuit of Crete three times a day; according to Plato three times a year. In Plato he is merely a strict minister of justice and was called "brazen," simply because he carried with him the laws engraved in brass. Talus, the "yron man," plays a considerable part, of course, in Spenser's *Faerie Queene*, Book V, as the attendant of Artegall. The same character doubtless suggested to Spenser, Disdain, the giant of gold, who guards a gate in the Cave of Mammon, Book II, Canto VII, st. 40 ff.

There are references to Talus as the man of brass who makes the circuit of Crete in Lucian's *Works* (Teubner ed.), II, 160 (*Saltatio*) and III, 108 f. (*Philopseudes*). In the latter Lucian implies that the automata of Daedalus (cf. above Plato's *Euthyphro*) were wooden. The walking statue of Pelichus, the Corinthian general, in this same passage is not an automaton. It belongs rather in the realm of ghost-stories.

Talus in Apollonius of Rhodes makes it seem likely that such conceptions with regard to the Age of Gold, of Brass, etc., were not peculiar to these authors.

Let us turn now to the mediaeval romances.<sup>1</sup> The earliest example I am familiar with in works of this class occurs in the *Pèlerinage de Charlemagne*, ll. 352 ff. (ed. E. Koschwitz, 4th ed., Leipzig, 1900), a poem of the first half of the twelfth century. In the description of the wonders of the palace at Constantinople something is apparently wanting immediately before l. 352. The passage accordingly begins abruptly:

De cuivre et de metal tresjetet dous enfanz.  
 Chascuns tient en sa boche un corn d'ivoire blanc.  
 Se galerne ist de mer, bise ne altre venz  
 Qui fierent al palais dedevers occident,  
 Il le font torneier et menuet et sovent,  
 Come roë de char qui a terre descent.  
 Cil corn sonent et boglent et tonent ensement  
 Com tabors o toneires o granz cloche qui pent;  
 Li uns esguardet l'autre ensement en riant  
 Que ço vos fust viaire que tuit fussent vivant.

These lines do not appear to have influenced the later romances.

<sup>1</sup> The introduction of human automata (apparently endowed with intelligence) into works of this class was no doubt favored by the common notion of the Middle Ages, ultimately derived from the patristic writers, that oracles were really the voices of evil spirits concealed in images of the pagan deities—indeed, that the gods of Greece and Rome were merely devils. This is well illustrated, for instance, in the following passage of the *Roman de Thèbes*, II, 106 ff. (ed. of L. Constans for the Société des Anciens Textes Français, Paris, 1890):

Encor n'erent pas crestien  
 Mais por le siècle tot paiien:  
 L'un aouroient Tervagan,  
 L'autre Mahom et Apolan;  
 L'un les estoilles et les signes,  
 Et li auquant les ymagines;  
 Li un fissent ymages d'or,  
 Qu'il pendoient en leur tresor,  
 L'un de keuvre, d'estain, d'argent,  
 Cèles de fust la povre gent.  
 De çou quidoient avoir dons.  
 Et li dius lor donnast respons:  
 Ce n'ert pas voirs, ains estoit fable,  
 Car çou erent li vif diable  
 Qui les respons a els donnoient  
 Et les caitis en decevoient.

Cf. with this *Estoire del Saint Graal*, Sommer's *Vulgate Version of the Arthurian Romances* (Washington, 1909), I, 45 (devil in an image of Mars); *Perlesvaus*, Branch XXX, 15. The devil would even enter an image of the Virgin Mary. See Ward's *Catalogue of Romances in the Department of MSS in the British Museum*, II, 668 (London, 1893). In *Enfances Guillaume* (Léon Gautier's *Les épopées Françaises*, 2d ed., IV, 298) a man enters an image of Mahomet and simulates the oracle. Even for John Milton, oracles are the utterances of devils. See *Paradise Regained*, I, 430 ff. This conception of oracles is familiar also to Mahometans; cf. *Les cent et une nuits, traduites de l'arabe par G. Demombynes*, p. 302, Paris, 1911.

Probably<sup>1</sup> the next in date of the passages is the one in the *Eneas* (ca. 1160), ll. 7691 ff., ed. Jacques Salverda de Grave (Halle, 1891). Describing the tomb of Camilla, the poet says:

Ja mais la lanpe ne charra  
 tant com li colons la tendra;  
 il la tendreit toz tens mais bien,  
 se nen esteit seul une rien:  
 un archier ot de l'autre part,  
 tresgetez fu par grant esguart,  
 endroit le colon ert asis  
 sor un perron de marbre bis;  
 son arc tot entesé teneit  
 et cele part visot tot dreit.  
 Li boldons esteit encochiez  
 et esteit si apareilliez  
 que le colon de bot ferist,  
 tantost com de la corde issist.  
 Li archiers puet longues viser  
 et toz tens mais l'arc enteser,  
 mais ja li boldons n'en istreit,  
 se primes l'arc ne distendeit  
 li laz d'une regoteore,  
 ki apareilliez ert desore,  
 ki teneit l'arc toz tens tendu.  
 A un sofle fust tot perdu:  
 ki sofflast la regoteore,  
 et el destendist en es l'ore  
 et li archiers idonc traisist  
 dreit al colon si l'abatist,  
 donc fust la chaeine rompue  
 et la lanpe tote expandue.

Salverda de Grave<sup>2</sup> sees rightly in the satyr of the *Chambre de Beautés* of the *Roman de Troie* (ca. 1160), Constans' ed., II, 374 ff., the influence of this archer. The passage in question is too long to

<sup>1</sup> The relative date of the *Eneas* and *Roman de Troie* is not altogether settled.

<sup>2</sup> Introduction, xxix, note. He also calls attention to the fact that this lamp and archer are found in the Virgil legend. Cf. the *Image du monde* (ca. 1245) quoted by Comparetti, II, 200 f.—somewhat similar also in Conrad of Querfurt (end of twelfth century), *ibid.*, II, 186. Salverda de Grave is inclined to believe that *Eneas* is earlier than the Virgil legend. I believe myself that the latter in all probability took over this particular feature from the romances. No existing text of the legend is so old as the *Eneas* or *Roman de Troie*. The first romance that makes any considerable use of the Virgil legend is the *Cleomades* of Adenès li Rois (end of the thirteenth century). Even in Italy the diffusion of the legend was slow. See Comparetti, II, 139.

quote in full. We have there four automata, two female and two male. One of the female figures held a magic mirror, the other performed somersaults on its column. One of the male images played on all sorts of musical instruments and scattered flowers. The figure of an eagle sat on this image at which "un satirel hisdos" was constantly shooting. The second of the male images showed every man what he most needed.

In the Salle aux Images of Thomas' *Tristan*, I, 309 ff. (ca. 1170), ed. J. Bédier, (2 vols., Paris, 1902-5, for the Société des Anciens Textes Français), we have no doubt an imitation of the Chambre de Beautés of the *Roman de Troie*. At least, the images in the latter probably suggested those in the former.<sup>1</sup> In the *Tristan* poem, the hero has images of Iseult of Cornwall, Mark, etc., made and placed in this hall (in Brittany). Iseult's image is guarded by one of the giant, Moldagog, which was constantly brandishing an iron club (p. 312).

Contemporary with Thomas' *Tristan*—whether somewhat earlier or somewhat later it is impossible to say—is the *Roman d'Alexandre* of Lambert li Tors and Alexandre de Bernay, edited by H. Michelant as Vol. XIII of the "Bibliothek des literarischen Vereins in Stuttgart" (Stuttgart, 1846). In the section of this work called by the editor, *Fontaine de Jouvence*, Alexander comes to a bridge (p. 343) defended as follows:

de l'autre part de l'pont ot i. tresgeteis  
 ii enfans, de fin or, fais en molle fondis.  
 li i. fu lons et grailes, l'autres gros et petis;  
 members orent bien fais, vis formés et traitis;  
 si com l'os aproca et il oent les cris,  
 cescuns saisit i. mail, s'est li pas contredis,  
 par desous ot i. brief que i. clers ot escriis,  
 qu'est fait par ingremance desfendre à l'plaiseis.

Alexander retires, but an old Persian who is accompanying him says that he will stop the images. This is the way he does it (p. 344):

Pres de l'encantement est cil ajenellies  
 et saut de l'pont en l'iave et puis est redreciés.  
 ses mains tendi en haut et revint sor ses piés,  
 puis se rabaise en l'iave, ii. fois i est plonciés.

<sup>1</sup> See Bédier's note to p. 309.



à la tierce fois quant il fu essechiés,  
 voiant tous caus en l'iave li enfés bronciés  
 par tel air en l'iave que tous est depeciés;  
 voiant les ious le roi, est des poisons mangiés.  
 puis que li i. d'aus fu en l'iave périlliés,  
 ne pot durer li autres que ne soit depeciés.  
 i. diables l'enporte ki fu aparilliés,  
 les jambes li pecoient, les bras li a brisiés.

This feature of the French poem is not found in the Greek and Latin versions of the Alexander legend. Like the whole episode with which it is connected—also unrepresented in these versions—it is, no doubt, of oriental origin.<sup>1</sup> We have here for the first time the two automata defending the entrance to something—a conception which, as we shall see, recurs in several of the later romances.

Later on, in the *Roman d'Alexandre* (Michelant's ed., p. 445), we have two similar figures guarding with "bastons d'argent" the splendid tomb which Alexander had erected over the Admiral:

com autre campion vont-il esciermissant.

So it would seem that in both these instances the automata are endowed with intelligence.

Probably the next in date of the examples is the one found in *Floire et Blancheflor*<sup>2</sup> (end of twelfth century), p. 231, ed., E. du Ménil (Paris, 1856). Here again we have doubtless oriental influence, since the whole story seems to be of oriental origin. In this case, after all, the automata are merely the result of illusion. The King is trying to divert Floire who is grieving over his separation from Blancheflor. An enchanter performs wonderful tricks for his amusement. Among other things he causes a bird to appear with a wheel in its beak.

La roëlle estoit un topace,  
 Qui plus estoit clere que glace;

<sup>1</sup> See Paul Meyer's *Alexandre le Grand dans la littérature française du moyen âge*, II, 182 (2 vols., Paris, 1886). The exact source, however, is not known.

<sup>2</sup> The oldest extant version is a redaction apparently of one composed between 1160 and 1170. Cf. Joachim Reinhold, *Floire et Blancheflor*, pp. 4, 9, Paris, 1906. Reinhold, pp. 119 ff., disputes the oriental origin of the story, believes that the story of Cupid and Psyche in Apuleius' *Metamorphoses* and the Old Testament Book of Esther were the true sources. In *Le moyen âge* for January–February, 1909, pp. 23 ff., however, G. Huet seems to prove that Apuleius' *Metamorphoses* (including Cupid and Psyche story) was not known to the Middle Ages—at least until the thirteenth century.

Et si estoit douze piés lée.  
 Une ymage i avoit formée;  
 D'or estoit, grant com un vilains:  
 Une harpe tint en ses mains,  
 Et harpe le lai d'Orphéy:  
 Onques nus hom plus n'en oi  
 Et le montée et l'avalée:  
 Cil qui l'oent moult lor agréé.  
 Atant es vous un chevalier  
 Merveilleus saus sor son destrier;  
 De cors n'avoit mie deus pies;  
 De gambes ert si alongiés,  
 Asses plus que toise et demie;  
 Lors cantoit clere melodie.

Human automata are also found in several of the principal Arthurian romances. The exact order of composition of these romances has not been fixed, but I have adopted that which seems to me most probable:

First in the *Conte del Graal*, ll. 13353 ff. (ed. Potvin, 6 vols., Mons, 1866-71), in the so-called *Livre de Karados*, really a separate biographical romance, inserted in the first continuation to Chrétien's poem.<sup>1</sup> The passage runs as follows (describing the entrance to Alardin's tent):

Car a l'issue de la tente  
 Estoient par encantement  
 II. ymages d'or et d'argent;  
 Del pavillon li uns fermoit  
 L'uis et l'autres desfermoit;  
 Jà n'i eust autre portier;  
 Et encore d'autre mestier  
 Servoient, car l'une est manière  
 De bien harper à grant manière;  
 L'autre ymage del autre part  
 Ens en sa main tenoit un dart,  
 Jà n'i veist entrer vilain  
 Ne le ferist trestout a plain;  
 Et l'autre ymage qui tenoit  
 La harpe une costume avoit:

<sup>1</sup> Cf. Miss J. L. Weston's *Legend of Sir Perceval*, I, 14, 16 (2 vols., London, 1906-9). The *Livre de Karados* belongs to the end of the twelfth or beginning of the thirteenth century.

Pucièle ne s'i puet celer;  
 Qui ensi se face apiéler  
 Por oec que soit despucelée,  
 Tantos come vient à l'entrée  
 La harpe sone la descorde;  
 De la harpe ront une corde.

In the image of the harper here we have simply a new application of the *motif* used later on in this same *Livre de Karados* (*Conte del Graal*, ll. 15640 ff.), where no knight is able to drink out of a certain horn, unless his wife is chaste.<sup>1</sup> This test of chastity no doubt suggested also the test of nobility with which the other figure is concerned.<sup>2</sup> The writer was, besides, probably familiar with the archer of the *Eneas* and *Roman de Troie* (see passage quoted above).

The prose *Lancelot*<sup>3</sup> contains examples: cf. H. O. Sommer's *Vulgate Version of the Arthurian Romances* (Washington, 1910), III, 144, 151, 191, in the Dolerouse Garde episode. In the first two passages it is a question of the copper effigy of an armed knight on horseback over the second gate who falls as soon as the man destined to conquer the castle passes the first gate. This effigy, however, does not defend the castle. It is different with the two copper knights of the third passage which guard the entrance to a chamber in the cave with their swords. Lancelot passes them with great difficulty, casts into a well the monstrous man with black head and flaming mouth who guards another door, and comes to a copper damsel who holds the keys of the enchantments in her right hand. He takes them, goes to a copper pillar in the midst of the room where he finds the inscription: "Ichi desferme la grosse clef et le menue desferme le coffre perilleus." He opens the pillar and then the coffer, despite the effort to frighten him made by the devils in the latter. On going forth he discovers that the enchantments have all been undone and the copper images broken.

<sup>1</sup> For such chastity tests—a widespread *motif*—see F. J. Child's *English and Scottish Popular Ballads*, I, 257 ff.

<sup>2</sup> Hertel, p. 18, cites also the figures in the *Chevalier au cygne*, p. 116, ed. C. Hippeau, Paris, 1874 (thirteenth century redaction), which pointed to anyone who rendered a false judgment.

<sup>3</sup> This is commonly assigned to the beginning of the thirteenth century. It may possibly belong, however, to the end of the twelfth century.

From the closing years of the twelfth century we have brazen men in the Virgil legend<sup>1</sup>—in Conrad of Querfurt the brazen archer whose arrow started the eruption of Vesuvius—in Gervase of Tilbury the brazen trumpeter who blew back the ashes from this same mountain—in Alexander of Neckham, the spearman of brass at Rome who pointed in the direction from which danger was impending—but the first text cited by Comparetti, which ascribes to Virgil the invention of automata who guard something with their weapons, is a version of *L'image du monde*, composed about 1245—so long after this conception had become a commonplace of the romances, without reference to Virgil. It is plain from this that the Virgil legend was influenced by the romances—probably more than vice versa. The copper images in the prose *Lancelot* were no doubt suggested by the descriptions in Thomas' *Tristan* and the *Roman d'Alexandre*, cited above.

In its turn the *Lancelot* passage, I believe, served as the model for the *Perlesvaus*.<sup>2</sup> See Potvin's ed., *Perceval le Gallois*, I, 63 f., 201 ff. In the first of these passages Gawain comes to a castle guarded by a lion and by two "vileins de cuivre marssis qui fichiez estoient el mur et descochoient par anging quarriaus d'arbaleste par grant force et par grant air." More extensive is the passage (201 ff.) describing Perceval's adventure at the Copper Castle. "Il avoit dedanz le chastel mout de gent qui le cor<sup>3</sup> de cuivre aouroient et qui ne créoient en autre Dieu." There were evil spirits in this image whose utterances were accepted as oracles. The entrance to the castle was guarded by two men "fez par l'art de nigromance" who kept striking with two big iron mallets. Perceval crosses the bridge which leads to the entrance. A voice from above the entrance tells him that the "vileins de coivre" cannot harm so good a knight as he is. So it turns out, for they cease their blows, as he passes in. He finds the

<sup>1</sup> Cf. the texts assembled by Comparetti, *Virgilio nel medio evo*, II, 185 ff.

<sup>2</sup> The date of the *Perlesvaus* is much disputed. It seems to me manifestly subsequent to the prose *Lancelot*, even if we accept the theory that the extant MSS preserve only a later redaction of the romance. W. A. Nitze puts it between 1200 and 1212. See his *Old French Grail Romance, Perlesvaus*, Baltimore, 1902, p. 103. But A. Jeanroy, *Revue critique*, October 10, 1904, agrees with Birch-Hirschfeld that it belongs in the second third of the thirteenth century. This, I believe, is too late.

<sup>3</sup> So throughout Potvin's text—that is, "horn." I have no doubt, however, that the true reading is "tor" = bull.

inhabitants all worshipping the image within. He summons them to a meeting in a hall of the castle, and the voice bids him compel them to run the gauntlet of the two copper men—"car la porra-il bien esprouver liquel voudront Dieu croire et liquel non" (p. 203). Out of one thousand five hundred only thirteen stood the test. The rest were destroyed by the copper men. The evil spirit who was in the "cor de coivre" issued forth and the "cor" itself melted.

In the episode of the Turning Castle (pp. 194 ff.) a little before the one just quoted, there are on top of the castle copper cross-bow archers and trumpeters, who, of course, prove ineffectual against Perceval. The romancer even attributes to Virgil the invention of this castle when the philosophers went in quest of the Earthly Paradise. We have here again, however, an instance of the Virgil legend absorbing material which was originally independent of it. The Turning Castle is a Celtic conception.<sup>1</sup>

Curious is the automaton representing a beautiful woman with which Mordrain, before his conversion, was in the habit of lying,<sup>2</sup> according to the *Estoire del Saint Graal* (or *Grand Saint Graal*, as it is often called), Sommer's *Vulgate Version of the Arthurian Romances*, I, 83: "Cele samblance estoit de fust la plus bele qui onques fust ueue en guise de feme si gisoit li rois o lui carnelment et le uestoit al plus richement quil pooit et li auoit fait faire vne cambre dont il ne quidoit mie que nus hons morteus peust trouver luis." The *Estoire del Saint Graal* was composed early in the thirteenth century. Mordrain's strange custom reminds one of the remarkable story told in the pseudo-Lucianic dialogue, *Amores*, Teubner ed. of Lucian's Works, II, 214 ff., according to which a young man fell so desperately in love with the statue of Aphrodite (by Praxiteles) in her temple at Cnidus that he secreted himself in the building one night to have access to the image of the goddess.<sup>3</sup>

Doubtless in imitation of the prose *Lancelot* we have a copper knight defending the entrance to a castle in the prose *Tristan* (ca.

<sup>1</sup> See G. Huet, *Romania*, XL (1911), 235 ff.

<sup>2</sup> For a similar custom (with sexes reversed) in the actual marriage rites of many heathen peoples in the Far East, see W. Hertz, *Gesammelte Abhandlungen* (pp. 270 ff.), herausgegeben von F. von der Leyen, Stuttgart and Berlin, 1905.

<sup>3</sup> Cf. also the singular story, Plutarch's *Moralia*, vii. 46 f. (Teubner ed.), of how Zeus excited Here's jealousy by a female image of wood.

1220), E. Löseth, *Le roman en prose de Tristan*, p. 223, Paris, 1890. Morgain la Fée established the enchantments of the castle. Galahad is to overthrow the copper knight at the same moment that Girflet reads a certain inscription over the castle-gate.

About the same date<sup>1</sup> as the prose *Tristan* is *Huon de Bordeaux*. We have in this poem (ll. 4562 ff.; ed. F. Guessard and C. Grandmaison, Paris, 1865) a description of how two copper men with flails guard the entrance to the castle of Dunostre, built by Julius Caesar. The fairy-king, Auberon, describing it, says:

Et s'a .ii. hommes a l'entrer de l'ostel;  
 Tout sout de keuvre et fait et compasé,  
 Si tient cascuns .i. flaiel acouplé;  
 Tout sont de fer, moult font a redouter.  
 Tout ades batent et yver et esté,  
 Et si vous di, par fine verité,  
 Une aloete qui bien tost set voler  
 Ne poroit mie ens el palais voler  
 Que ne fust morte; ne poroit escaper.

A great giant named Orgueilleus inhabits the castle. In ll. 4715 ff. it is described how Huon goes to Dunostre and finds the automata, as Auberon had described them. At first he does not know what to do, but he sees a gold basin hanging near by, on which he strikes three times. A maiden hears it and comes to his assistance. She opens a door and a wind issues forth which overthrows the figures.

These figures were, no doubt, suggested by those in the Dolerouse Garde episode of the prose *Lancelot*, cited above.<sup>2</sup>

In the Middle High German poem *Diu Crône* (ca. 1220) by Heinrich von dem Türlin (ll. 6993 ff.; ed. G. H. F. Scholl, Stuttgart, 1852) we have a black figure with a horn—the work of a necromancer—which gave warning by its blasts, whenever a strange knight came to the castle. This reminds one of Virgil's brazen spearman, described by

<sup>1</sup> On this subject see Carl Voretzsch, *Die Composition des Huon von Bordeaux*, p. 88, Halle, 1900.

<sup>2</sup> In his Halle dissertation (1910), *Die Einflüsse der Arthurromane auf die Chansons de Geste*, p. 34, G. Engel explains them as imitations of those in the *Conte del Graal* ll. 13353 ff., quoted above, but they are evidently much more like the figures in the prose *Lancelot*. For a summary of discussion as to this Dunostre episode of *Huon de Bordeaux*, see Engel, *ibid.*, 33 ff.

Alexander of Neckham, Comparetti, II, 193, who pointed with his spear in the direction from which there was danger impending. *Diu Crône* is, of course, based on French materials—largely lost.

We will not dwell on the automata ascribed to Virgil in *Cleomadès* (end of the thirteenth century) (pp. 52 ff.; ed. A. Van Hasselt, Brussels, 1865). Most of these seem derived from the Virgil legend which grew up at Naples and are sufficiently discussed in Comparetti's treatise. In any event I see no especial influence of the romances in this passage. By the fourteenth century Virgil's fame as a magician was so well established that a poet was at liberty to father on him any wonderful conception. Thus the author of the *Dame de lycorne* (first third of the fourteenth century) (ll. 3882 ff.; ed. F. Gennrich, Dresden, 1908) ascribes to him the invention of the two copper knights that fight under a turning tree.

Contemporary with the *Dame de lycorne* is *Li bastars de Buillon*, ed. A. Scheler, Brussels, 1877. Here (pp. 129 f.) we have the two men of gold that guard the rose with their flails until the knight who is destined to pluck it shall come. Paulin Paris, *Histoire littéraire de la France*, XXV, 605 ff., (1869), considers this an imitation of the episode in the prose *Lancelot*, quoted above. The flails, however, seem to show that the writer had rather *Huon de Bordeaux* in mind.

It will be observed that the mediaeval automata, unlike those in Homer and Apollonius, have only a very limited intelligence, if intelligence it can be called. They are created for some single function—usually to guard an entrance—and nothing more.<sup>1</sup> In this regard they resemble more nearly similar figures in oriental stories. I have made no full collection of these latter. Clouston, pp. 304 f., has given one or two examples from the Arabian Nights, and there are some other instances in the same collection. Thus in the tale called *Djaudar*<sup>2</sup> a copper trumpeter announces the approach of a stranger, just like the figure in *Diu Crône*, cited above, and in

<sup>1</sup> Notice, however, the example cited by Clouston, p. 298, from the Sanskrit *Kathā Sarit Sāgara*, translated by C. H. Tawney, 2 vols., Calcutta, 1880–81 (Bibl. Indica, New Series, No. 456). Here we have a vast city, the inhabitants of which are all wooden automata. Clouston gives the reference as Vol. I, p. 290. On looking up the matter I found that this reference is wrong, and in the time that I was able to give to it I did not discover what is the right reference. No doubt, however, the passage is in one of the two volumes.

<sup>2</sup> V. Chauvin, *Bibliographie des ouvrages arabes ou relatifs aux arabes publiés dans l'Europe chrétienne de 1810 à 1885*, V. 265 (Liège and Leipzig, 1901).

*The Enchanted Horse*<sup>1</sup> a golden trumpeter gives warning, as soon as a spy enters the town, and causes him to drop dead.<sup>2</sup> In the former case it turns out that an evil spirit is in the automaton. The following passage (cited by Clouston, p. 304) in W. F. Kirby's *The New Arabian Nights: Select Tales Not Included by Galland or Lane* (p. 215; London, 1882) reads quite like the one in the *Perlesvaus*, for example. It is in the story called *Joodar of Cairo and Mahmood of Tunis*. Misram, in his endeavor to deliver a maiden from captivity, has to go to the Castle of Pillars. He receives from Shilshanum the following directions: "Go through this hall into another, the door of which you will open with the third golden key. Here you will see two copper statues holding European bows in their hands and arrows which crush the hardest rocks to powder. As soon as they take aim at you, touch their bows with your sword and they will fall from their hands."

I have no doubt that oriental tales similar to these, penetrating into Europe by way of Constantinople, Southern Italy, or Spain, constituted originally the chief source of such conceptions in the romances and in the Virgil legend.

Modern literature lies outside of the scope of this article; so, in conclusion, I will content myself with citing as the most famous instance of an automaton in the fiction of recent centuries: E. T. A. Hoffmann's *Der Sandmann*. Through its derivatives, the opera, *Contes d'Hoffmann*, and the ballet, *Coppelia*, the automaton in this tale, representing a beautiful girl, is particularly well known to the present generation.<sup>3</sup> In the work of the modern writer the *motif* is,

<sup>1</sup> V. Chauvin, *ibid.*, p. 225.

<sup>2</sup> For the copper knight, who points the way, in the famous "City of Brass" tale, see Victor Chauvin, V, 33; cf., too, the *Ville de cuivre* in Godefroy Demombynes, *Les cent et une nuits*, p. 317, Paris, 1911. Earlier in the same story (pp. 302 ff.) occurs the idol animated by an evil spirit. Demombynes, p. 306, note 1, speaks of these magic statues, so frequent in oriental tales, as suggested by the monuments of Egypt and classical antiquity.

I have made no systematic search of folk-tales for the automaton *motif*. Despite its title, the widespread tale *L'homme de fer* contains no automaton. Cf. E. Cosquin, *Contes populaires de Lorraine*, II, 1 ff. It is a story of the Aladdin's Lamp type. In F. Panzer's *Beowulf*, Munich, 1910, I observe (p. 28) an iron man made by a smith. He talks and helps his maker. This is cited from a folk-tale. So *ibid.*, p. 47, iron and wooden children.

<sup>3</sup> Hoffmann's *Serapion's Brüder* fairly swarms with automata, the best of them being the Talking Turk. None of them, however, is equal to the heroine of *Der Sandmann*. The sole source of Hoffmann's automaton lore was Wiegleb's *Unterricht in der natürlichen Magie*, 20 vols., Berlin, 1786-1805. Cf. P. Sucher, *Les sources du merveilleux chez*



of course, used with an art infinitely superior to anything which the Middle Ages can exhibit. The latest example I have observed is in Anatole France's *L'île des Pingouins*, p. 156 (1907), where the Franciscan monk finds in Ireland a beautiful woman who sang to the lute, but in the end turned out to be an automaton. This may be a reminiscence of Hoffmann.

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*E. T. A. Hoffmann*, pp. 104 ff., Paris, 1912. A common swindle in the age of Cagliostro was fortune-telling by automata. Someone, however, was, of course, always concealed in the contrivance.

The most elaborate use of the automaton *motif* in literature is to be found in Villiers de l'Isle-Adam's *L'Ève future* (1886), to which my colleague, Professor L. P. Shanks, has called my attention. The heroine of this book, Hadaly, evidently suggested by Hoffmann's Olympia, is an automaton invented (or created) by Edison. The scene of the story is Menlo Park.